Image Quiz

A Mysterious Cause of Stool Ova

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Dr. Stelios F. Assimakopoulos, Department of Internal Medicine, University Hospital of Patras, Patras - 26504, Greece. E-mail: sassim@upatras.gr A 50-year-old woman presented for colonoscopy for investigation of diarrhea over the last 2 months with repeated observation of stool eggs. The patient reported no travel abroad, no close animal contact, consumption of raw food or untreated water, weight loss, fever, or perianal itching. Her past medical history was notable of generalized anxiety disorder with comorbid depression and irritable bowel syndrome and was currently treated with venlafaxine 150 mg once daily. Three separate stool tests for ova and parasites had been negative, blood exams showed no leukocytosis or eosinophilia and biochemical profile was also normal. The patient had been previously empirically prescribed albendazole, niclosamide, and praziquantel consecutively without clear up effect. Upon referral to our department, despite her good physical condition, she was obviously emotionally stressed and especially worried about her medical problem. Lower endoscopy revealed a normal colonic mucosa with intraluminal presence of numerous eggs of about 1 mm diameter [Figure 1].

QUESTION

What is the diagnosis for patient's stool eggs?



Figure 1: Endoscopic view of the colon: Intraluminal presence of numerous spherical white "eggs" of about 1 mm diameter and normal colonic mucosa



ANSWER

Parasites found in the intestines can be categorized into Protozoa, which are single-celled organisms and Helminths, including nematodes, cestodes, and trematodes, which are multicellular organisms whose size varies from some millimeters to several meters.[1] Protozoan cysts and trophozoites and helminth eggs can be detected only by microscopic examination of stool preparations since they have a size in the micrometer scale. [2] Macroscopically, intact worms or proglottids may occasionally be seen in stools in some helminthic enteric parasitoses^[2]; however, the observed spherical particles seen in our patient do not resemble their shape and morphology. Being assured after endoscopy about the ingested nature of the observed stool eggs we recalled information regarding ingestion of egg-like objects. We finally found the solution for this enigma in the patient's orally taken medication. The capsule of venlafaxine 150 mg proved to be the "phantom parasite" producing patient's stool ova [Figure 2]. Thereafter, the patient reported that treatment with venlafaxine was started about 2 weeks before the observation of stool ova.

Given the fact that most parasitic infections are definitively diagnosed on the basis of microscopic stool examination, much attention has been given concerning diagnostic pitfalls in microscopic examination of stool for ova and parasites; however, very little has been written pertaining to macroscopic mimics of parasites in stool samples.^[3]



Figure 2: The opened capsule of venlafaxine 150 mg containing a lot of spherical white particles

Familiarity with the gross appearance of enteric parasites as well as their common mimics is a necessity for clinicians to quickly alleviate the concerns of their patients and prevent unnecessary expenditure on further workup.

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